

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/6/2008 has been entered.

## **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen Wolf on 12/11/2008:

The application has been amended as follows:

2.1 **Cancel** Claims 27-36.

2.2 **Add** new Claims 37-45 listed below:

--37. An acrylic thermally conductive composition comprising:

a thermally conductive filler; and

a crystalline aliphatic acrylic polymer comprising from 55 to 80 wt% of a homopolymer or copolymer of one or more (meth)acrylate ester monomers containing an alkyl group of 18 or more carbon atoms and further comprises a homopolymer or copolymer of one or more (meth)acrylic monomers wherein the (meth)acrylic monomers contain an alkyl group of 12 carbons or less.

38. A composition according to claim 37 wherein the (meth)acrylate ester monomers are selected from octadecyl (meth)acrylate, nonadecyl(meth)acrylate, icosanyl(meth)acrylate, henicosanyl(meth)acrylate, docosanyl(meth)acrylate, tricosanyl(meth)acrylate, tetracosanyl(meth)acrylate, octadodecyl(meth)acrylate, and combinations thereof.

39. A composition according to claim 37 wherein (meth)acrylic monomers are selected from ethyl (meth)acrylate, butyl (meth)acrylate, hexyl(meth)acrylate, 2-ethylhexyl (meth)acrylate, octyl (meth)acrylate, isooctyl (meth)acrylate, decyl (meth)acrylate, dodecyl (meth)acrylate, and combinations thereof.

40. A composition according to claim 37 wherein the crystalline acrylic polymer has a melting point of 25°C or higher and 100°C or lower.

41. A thermally conductive sheet obtained from a composition according to claim 37.

42. A laminate comprising:

an electronic part;

a thermally conductive sheet obtained from a composition according to claim 37 having a first side and a second side, wherein the first side is in contact with the electronic part; and

a heat sink or heat radiator in contact with the second side of the thermally conductive sheet.

43. A laminate according to claim 42 wherein the electronic part is selected from a power transistor, a graphic IC, chip sets, memory chips, central processing units, and combinations thereof.

44. A laminate according to claim 42 wherein the thickness of the thermally conductive sheet is less than 10 mm.

45. A laminate according to claim 44 wherein the thickness of the thermally conductive sheet is less than 5 mm.--

#### **EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance: the closest prior art known to the Examiner is listed on the attached PTO 892 and 1449 forms.

Shiba et al. (US Patent 6080480) teaches a delayed tack adhesive compositions which

can contain mixtures of homopolymers or copolymers of radical-polymerizable monomers having straight or branched chain alkyl groups containing 9 to 18 carbons (Col. 13, lines 31-43). The reference also teaches the presence of fillers (Col. 6, lines 40-47). However, none of the prior art teaches a composition which is comprised of 55 to 80 weight percent homopolymers or copolymers of (meth)acrylate ester monomers comprising 18 or more carbon atoms further comprising homopolymers or copolymers of (meth)acrylic monomers containing an alkyl group of 12 carbons or less.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 9:30 am to 6:00 pm.
5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. P. T./  
Examiner, Art Unit 1796

/DOUGLAS MC GINTY/  
Primary Examiner, Art Unit 1796